



Agenda Item 9

August 20, 2013

ITEM NAME: The Impact of CalPERS Long-Term Care Program on End-of-Life Medical Care Costs

PROGRAM: Health Benefits

ITEM TYPE: Information

EXECUTIVE SUMMARY

This agenda item is a research study examining the impact of the long-term care insurance program on the end-of-life medical care utilization and costs. Researchers from Univita Health and the University of Minnesota analyzed data from long-term care claimants and health claims from the California Public Employees' Retirement System (CalPERS) self-funded preferred provider organization. Claimants using long-term care benefits had 13.8 percent lower total medical costs at the end of life than those that did not use long-term care benefits. Additionally, claimants using long-term care benefits had significantly lower pharmacy, inpatient admission and outpatient visit costs.

STRATEGIC PLAN

This informational item supports Strategic Plan Goal A: "Improve long-term pension and health benefit sustainability." The long-term care program could reduce costs at the end of life making health benefits sustainable.

BACKGROUND

The CalPERS Long-Term Care Plan is a self-insured, underwritten long term care insurance plan created by the California Legislature in 1994 and began being offered in 1995. Individuals in the program qualify for benefits when they need regular hands-on assistance with two or more Activities of Daily Living (called ADLs such as bathing, dressing, transferring, toileting, feeding and managing incontinence) dependencies for at least 90 days or if they require continual supervision for health and safety because of a moderate to severe cognitive impairment.

While there has been substantial interest in the impact of advanced directives, hospice and palliative care on direct health care cost at the end of life, little is known about the impact of long-term personal care for those with functional dependencies or in the latter stages of cognitive impairment on end-of-life direct medical care costs.

The researchers hypothesis is that the availability of paid long-term care services and care management at the end of life will reduce health care utilization and cost of care to individuals at the end of life, as compared to those who also have long-term care

needs but do not have access to long term care services paid for by a long-term care insurance program.

ANALYSIS

This study was a retrospective analysis examining health care utilization and costs among CalPERS members and covered dependents using 24 months of health care claims data and long-term care benefits and claims information. CalPERS health plan enrollees aged 65 and older who died between January 1, 2007, and December 31, 2011, were eligible for the study. Following Health Insurance Portability and Accountability Act guidelines and research protocols specified in an approved University of Minnesota's Institutional Review Board application, pharmacy and medical claims data were obtained for eligible members during two time periods (0-12 months and 13-24 months prior to death).

Researchers used a propensity score model with 17 variables to create a comparison group that is made up of CalPERS members that would have been likely to use long-term care benefits in the last year of life if they had been long-term care program members. This comparison group (6,870 individuals) was similar to members who received long-term care benefits in the last year of life (830 individuals) because they were alike on a variety of measures, such as frailty burden, dementia, and medication in months 13 through 24 prior to death.

The treatment and comparison groups were compared using linear regression on 12 outcome measures, including six cost measures (total medical costs, total pharmacy costs, inpatient admission costs, emergency department costs, outpatient visit costs, skilled nursing facility costs) and six utilization measures (emergency department visits, inpatient admission rates, inpatient admission bed days, outpatient visits, skilled nursing facility admission counts, and skilled nursing facility bed days). All outcome measures were based on services utilized in the 12 months before death.

The findings suggest that claimants in the last 12 months of life using long-term care benefits had:

- 13.8% significantly lower total medical costs
- 13.2% significantly lower total pharmacy costs
- 34.0% significantly lower inpatient admission costs
- 16.2% significantly lower outpatient visit costs
- 11.3% significantly higher skilled nursing facility bed days

than those that did not use long-term care benefits. No difference was seen emergency department visits or costs, outpatient visits, skilled nursing facility admissions or costs.

A sub-analysis of those without dementia showed similar findings to the overall findings, i.e., lower costs in seven of the outcome areas; however, a sub-analysis of

those with dementia showed that the utilization and costs were similar between those with and without long-term care benefits. For those with dementia, the benefits of the long-term care program eroded the decreases in utilization and savings in health care costs. The researchers conclude that the availability of paid long-term care services and care management at the end of life measurably reduces health care expenditures at the end of life.

BUDGET AND FISCAL IMPACTS

This research study was funded by Univita Health, Inc. with an additional \$18,000 for health care claims data extraction provided by the CalPERS Long-Term Care Program.

ATTACHMENTS

Attachment 1 – The Impact of CalPERS Long-Term Care Program on End-of-Life Medical Care Costs

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